

REMARKS

The Applicants appreciate the continuing thorough examination of the present application that is reflected in the Final Official Action. In response, independent claims 1, 17, and 27 have been amended to include the recitations of certain dependent claims to emphasize certain aspects of the routing token stored in annotated messages. Applicants respectfully submit that all of the pending claims are patentable for at least the reasons that will now be explained.

Claim Amendments Responsive to the Rejections Under 35 U.S.C. Sec. 112, second paragraph

Regarding the rejection in Section 3 of the Final Office Action, Claims 1, 17, and 27 have been amended as suggested by the Examiner to clarify that the client computer sends the recited messages and the clickstream correlator value to the server computer.

Regarding the rejections in Section 4 and 5 of the Final Office Action, Claims 4, 19, and 29 have been amended to clarify that the clickstream correlator value is stored at the client computer for use when transmitting subsequent ones of the related messages to the server computer.

Amended Independent Claims 1, 17, and 27 Are Patentable Over Lowell

Claim 1 has been amended to include the recitations of Claim 15 and intervening Claims 2 and 13. Accordingly, amended independent Claim 1 recites (underlining added):

1. A method of providing improved clickstream data collection over a series of related messages exchanged between computers in a networking environment, comprising:

determining at a server computer a clickstream correlator value to be applied to related messages sent from a client computer, wherein the clickstream correlator value indicates whether clickstream data collection is being performed;

annotating at the server computer at least one of the related messages sent from the client computer with information reflecting the determined clickstream correlator value by storing the information reflecting the determined clickstream correlator value as part of a routing token in the annotated messages, wherein the routing token further

comprises information enabling identification of the client computer and server computer;

transmitting at least one of the annotated messages with the routing token containing the determined clickstream correlator value and the information enabling identification of the client computer and server computer for delivery to the client computer;

receiving at the server computer the clickstream correlator value and the information enabling identification of the client computer and server computer that are sent from the client computer with subsequent ones of the related messages; and

using the clickstream correlator value at the server computer to collect clickstream data that is indicative of how a user at the client computer interacts with content at the server computer.

Accordingly, the server computer determines a clickstream correlator value that is to be applied to related messages from a client computer. The server computer annotates related messages from the client computer by storing the clickstream correlator value information as part of a routing token in the annotated message, where the routing token includes information enabling identification of the client computer and server computer. The client computer returns the clickstream correlator value and the information enabling identification of the client computer and server computer to the server computer with subsequent ones of the related messages.

Because information enabling identification of the client computer and server computer is added to the token, the server may more accurately correlate collected clickstream data with a particular client computer, even when the communications flow through a "server-side edge server [which] is responsible for inspecting and modifying URLs in request and response headers to implement the cookie jar processing that supports improved clickstream collection." (Specification, page 22, lines 1-4).

Independent Claim 17 has been similarly amended to include the recitations of Claim 24 and intervening Claim 18, and independent Claim 27 has been similarly amended to include the recitations of Claim 34 and intervening Claim 28. Claims 17 and 27 are respectively computer program product and system claims that are analogous to the method of Claim 1.

Independent Claims 1, 17, and 27 stand rejected under 35 U.S.C. Sec. 102(e) as anticipated by U.S. Patent No. 6,381,632 to Lowell ("Lowell").

In rejecting Claims 1, 17, and 27, the Final Office Action cites to column 1, line 55 to column 2, line 10 of Lowell, repeated below:

Another type of monitoring program is called SiteTrack. SiteTrack works in connection with a World Wide Web server and tracks users as they move through a site on the World Wide Web. Such tracking is done using two different methodologies, one called "tokens," and the other called "cookies."

A SiteTrack cookie is an identifier stored on the user's computer. When a user accesses a SiteTrack'ed server, if the user's browser supports cookies, the server assigns a unique session ID, or "cookie" to the user. The session ID is stored on the user's computer and presented with all further requests to the server. The server can therefore identify users and monitor their activity as they move through the Web site.

Alternatively, where the user's browser does not support cookies, SiteTrack can insert "tokens," or alphanumeric strings, into the URLs embedded in hypertext markup language (HTML) pages that are sent to a user's browser. When a user links to another HTML page via the embedded URL, the embedded token can be recognized, and the user's activity can thus be monitored from the server. The token process has a drawback in that it can only monitor users when they are linking between pages on a single Web site.

Applicants note that the cited teaching of Lowell is from the "DESCRIPTION OF RELATED ART" section and, accordingly, is a characterization by Lowell of the prior art. Lowell discloses that a prior art server can insert a token into a URL that is embedded into a HTML page sent to a user's computer, and that the server can use the token returned by the user's computer to identify users and monitor their activity. However, the cited portion of Lowell does not disclose that the routing token added to the URL includes information enabling identification of the client computer and server computer. Moreover, the cited portion of Lowell does not disclose that the user's computer would return a clickstream correlator value and information enabling identification of the client computer and server computer back to the server computer with subsequent ones of the related messages.

Applicants submit that the other portions of Lowell do not disclose these missing recitations, and indeed appear to teach away from use of a server to monitor user activity. Indeed, Lowell distinguishes monitoring that is performing by a server, which it characterizes as prior art in the "DESCRIPTION OF RELATED ART" section, from monitoring that is performed by a user's computer as described pursuant to its invention in the "SUMMARY" and "DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS" sections. For example, Lowell discloses that the user's computer, not the server, performs monitoring of user activity by, for example, its teaching that "the monitor 10 is implemented in software, and more particularly as a dynamic linked library (DLL), so that it may load and execute transparently to the user ... [, and] may be executed by an executable program (EXE) that can be loaded by the user in any known fashion." (Lowell, Col. 4, lines 6-12). Using the user's computer for monitoring is further emphasized by Lowell's teaching that "the raw activity file 12 remains resident on the user's computer". (Lowell, Col. 7, lines 43-44).

Accordingly, Applicants submit that Lowell's description of the prior art in the "DESCRIPTION OF RELATED ART" section does not disclose at least the annotating, transmitting, receiving, and using recitations of Claim 1 below, and submit that the other portions of Lowell teach away from these recitations:

- annotating at the server computer at least one of the related messages sent from the client computer with information reflecting the determined clickstream correlator value by storing the information reflecting the determined clickstream correlator value as part of a routing token in the annotated messages, wherein the routing token further comprises information enabling identification of the client computer and server computer;

- transmitting at least one of the annotated messages with the routing token containing the determined clickstream correlator value and the information enabling identification of the client computer and server computer for delivery to the client computer;

- receiving at the server computer the clickstream correlator value and the information enabling identification of the client computer and server computer that are sent from the client computer with subsequent ones of the related messages; and

- using the clickstream correlator value at the server computer to collect clickstream data that is indicative of how a user at the client computer interacts with

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Filed: April 3, 2001
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content at the server computer.

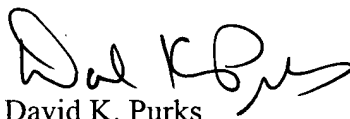
For at least these reasons, Applicants respectfully submit that Claim 1 and analogous Claims 17 and 27 are patentable over Lowell.

The pending dependent Claims are patentable at least per the patentability of the independent claims from which they depend.

CONCLUSION

Applicants respectfully request entry of the present claim amendments as placing the claims in condition for allowance, or alternatively as placing the claims in better condition for appeal and narrowing the issues for further consideration on appeal. No new issues are raised by the present claim amendments. In light of the above amendments and remarks, Applicants respectfully submit that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,



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